

Hamilton Halo – Bird responses to peri-urban pest control in Waikato, NZ

John Innes¹, Dave Byers², Neil Fitzgerald¹, Scott Bartlam¹, Corinne Watts¹, Danny Thornburrow¹

¹Landcare Research, ²Waikato Regional Council

Radio-tracking of tui (an endemic NZ honeyeater) in 2004-07 showed that they moved 5-23 km from Waikato urban centres to surrounding native forests at the onset of nesting. However nesting success was poor, due to predation by ship rats, swamp harriers and brushtail possums. We describe mammal pest control undertaken in these forests from 2007 onwards, and present results of biennial bird counts results from urban Hamilton during 2004-14. Pest control was highly effective, reducing ship rats to mean 2.7% tracking rate and brushtail possums to mean 1.2% residual trap catch in subsequent tui nesting seasons. Tui abundance and distribution increased significantly in Hamilton City after 2008, initially as winter visitors, then from 2012-13 tui started nesting in Hamilton, including in residential as well as 'green' areas. Blackbirds and songthrushes decreased in both green and residential areas during 2004-2014. Abundance index counts of most native bird species increased in Halo pest control (peri-urban forest) sites from 2002-12, but no increases were significant. We expect that ongoing pest control at Halo sites, plus urban pest control that is just now starting, will maintain high tui numbers and slowly increase other native forest birds, especially kereru (NZ pigeon) and korimako (bellbird) in Hamilton City and elsewhere in the central Waikato.